

REMARKS

At the outset, the Examiner is thanked for the thorough review and consideration of the pending applications. The Final Office Action dated April 17, 2007 has been received and its contents carefully reviewed.

By this Amendment, Applicants amend claim 9. Accordingly, Claims 9-11 are currently pending. Reexamination and reconsideration of the pending claims is respectfully requested.

In the Final Office Action, the Examiner rejected claims 9-11 under 35 U.S.C. § 103(a) as being unpatentable over Miyanaga et al. (U.S. Patent No. 5,932,893) in view of Fonash et al. (U.S. Patent No. 5,994, 164). This rejection is respectfully traversed and reconsideration is requested.

Claim 9 is allowable over the cited references in that claim 9 recites a combination of elements including, for example, "an electrical conductivity activation energy between 0.53 eV and 0.71 eV, ... wherein the polycrystalline silicon film is formed by crystallizing an amorphous silicon film containing the nickel metal by a thermal treatment carried in a temperature of about 400 to about 500°C". None of the cited references, singly or in combination, teaches or suggests at least these features of the claimed invention.

In particular, independent claim 9 recites "the polycrystalline film has an electrical conductivity activation energy between 0.53 eV and 0.71 eV". However, Fonash et al. merely teaches that the conductivity activation energy of SPC poly-Si films is 0.52 eV in a temperature of 290° C as recited in Fig. 8b. Thus, Applicant respectfully asserts that Fonash et al. fails to teach or suggest the polycrystalline film has an electrical conductivity activation energy between 0.53 eV and 0.71 eV," as required by amended independent claim 9.

In addition, independent claim 9 recites "the polycrystalline silicon film is formed by crystallizing an amorphous silicon film containing the nickel metal by a thermal treatment carried in a temperature of about 400 to about 500° C". However, Miyanaga et al. discloses the annealing temperature is about 550° C as recited in col. 11, line 56. Thus, Applicant respectfully asserts that Miyanaga et al. fails to teach or suggest the thermal treatment carried in a temperature of about 400 to about 500° C as required by amended independent claim 9.

Accordingly, Applicants respectfully submit that independent claim 9 and dependent claims 10 and 11, which depend therefrom, are allowable over the cited references.

Applicants believe the application is in condition for allowable and early, favorable action is respectfully solicited. If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these paper are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911.

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Respectfully submitted,

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